

Data Collection Worksheet

Please Note: The Data Collection Worksheet (DCW) is a tool to aid integration of a PhenX protocol into a study. The PhenX DCW is not designed to be a data collection instrument. Investigators will need to decide the best way to collect data for the PhenX protocol in their study. Variables captured in the DCW, along with variable names and unique PhenX variable identifiers, are included in the PhenX Data Dictionary (DD) files.

Waist measurement at midpoint between lowest rib and iliac crest:

Waist circumference was measured in duplicate using a non-stretch tape measure. First, the midpoint of the distance between the iliac crest (top of hip) and the bottom of the rib cage (10th rib) was identified and marked. Waist circumference was then measured at the midpoint. Measurement is taken to the nearest 0.1 cm.

Additional Points

- If you have problems palpating the rib, ask the participant to breathe in very deeply. Locate the rib and as participant breathes out, follow the rib as it moves down with your finger.

It is essential that the waist measurement is taken midway between the iliac crest and the lower rib and that the tape is horizontal. Therefore, adjust any clothing items to ensure that measurement is taken per above guidelines: that is, ensure that tape measure follows body lines, not clothing lines. **Interpretation of Findings** Waist circumference has become an important indicator of obesity and especially of abdominal obesity, including visceral and subcutaneous fat at the site measured. Often, it is compared with appropriate reference data for populations. The exact site, ages, and protocols used in the reference data need to be carefully identified; although several different body sites have been used, the actual measurement may differ considerably based on the site measured. Investigators should be sure to match the specific location of the waist circumference measurement with the reference data used.

Waist circumference is often a measurement criterion for defining metabolic syndrome. Because of the considerable changes in waist circumference with age and variation by gender, attention must be given to these factors when interpreting results.

Several references are provided as follows for discussions of appropriate applications of waist circumference measurements and applications related to waist-to-hip ratio and metabolic syndrome.

Protocol source: <https://www.phenxtoolkit.org/protocols/view/21602>